Letter to the Editor

Suicide before and after spinal cord injury

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We read with interest the article by Kennedy and Garmon-Jones[1] entitled "Self-harm and suicide before and after spinal cord injury: a systematic review", published in *Spinal Cord*. The authors studied the proportion of spinal cord injury (SCI) caused by suicidal behavior. They found that up to 6.8% of individuals with SCI had acquired their injury as a result of attempted suicide and between 5.8 and 11% of deaths after SCI were a result of suicide. Psychiatric diagnoses were identified to be a major risk factor for suicidal behavior. Kennedy and Garmon-Jones conclude there is a crucial need for risk assessment and psychological intervention for individuals with mental health issues following SCI.[1]

We agree with their conclusion on the crucial need for suicide risk assessment for individuals following SCI. However, we would like to point out that Kennedy and Garmon-Jones did not take into account a potential confounding factor, i.e. severe chronic pain, may be an important factor for triggering suicide.

Pain is common in patients with SCI. Dijkers *et al.*[2] conducted a systematic review on the prevalence of chronic pain after SCI, and found pain prevalence rates that ranged from 26% to 96%. Pain prevalence in the combined samples did not appreciably differ between males and females, those with complete versus incomplete SCI, and those with paraplegia versus tetraplegia.[2] The pain may be either of nociceptive or neuropathic type or a combination of the two.[3] While neuropathic pain following SCI is caused by an injury directly or indirectly to neural tissues resulting in dysfunction of the nervous system; nociceptive pain is caused by damage to non-neural tissue such as bone, joint, or muscle trauma causing structural and/or functional abnormalities. Pain from visceral origin may occur due to autonomic dysreflexia related to renal calculus, bowel, sphincter dysfunction, or headache.[3]

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There is an abundance of literature on suicidal behavior in patients suffering from chronic pain.[4–6] A recent meta-analysis by Calati *et al.*[7] compared the rates of suicidal thoughts and behaviors in individuals with and without physical pain. Calati *et al.* found that individuals with physical pain were more likely to report lifetime death wish, both current and lifetime suicidal ideation, suicide plan, and suicide attempt. Moreover, they were more likely to achieve suicide death.[7] However, Calati *et al.* acknowledged that there was publication bias detected in their study. For example, military veterans, if over-represented, could have biased results since military veterans are approximately twice as likely to die of suicide in comparison to nonveterans in the general population.[8–10] A subsequent analysis by Stubbs[8] adjusted for publication bias according to the trim and fill method, and confirmed the relevance of the results by Calati *et al.*

Recently, Mehta *et al.*[11] have published the first Canadian clinical practice guidelines for screening and diagnosis of neuropathic pain in people with SCI. The recommendations address methodology for assessment, documentation tools, team member accountability, frequency of screening and considerations for diagnostic investigation. We believe practice guidelines with these measures may have a far-reaching effect on reducing pain and pain-related suicide in patients with SCI.

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